

METHOD AND APPARATUS FOR A HIGH-SPEED SEARCH OF AN OPTICAL MEDIUM

Abstract

An apparatus and method for high-speed searching of an optical medium having a plurality of tracks. Light spots are directed by the apparatus onto the optical medium. As the spots traverse across the tracks in one of a first direction and a second direction, a photodetector unit receives reflected components of the light spots, thus forming respective electrical signals. Digital shaping circuitry converts the electrical signals into digital signals. A quadrature detector receives the digital signals which are arranged in quadrature relationship to each other, and produces an up-count signal indicating the light spots are traversing the tracks in the first direction and a down-count signal indicating the light spots are traversing the tracks in the second direction. A counter counts the up-count signal and the down-count signal to determine a number of tracks traversed by the light spots.